

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P230419

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65-SQP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4362.4 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

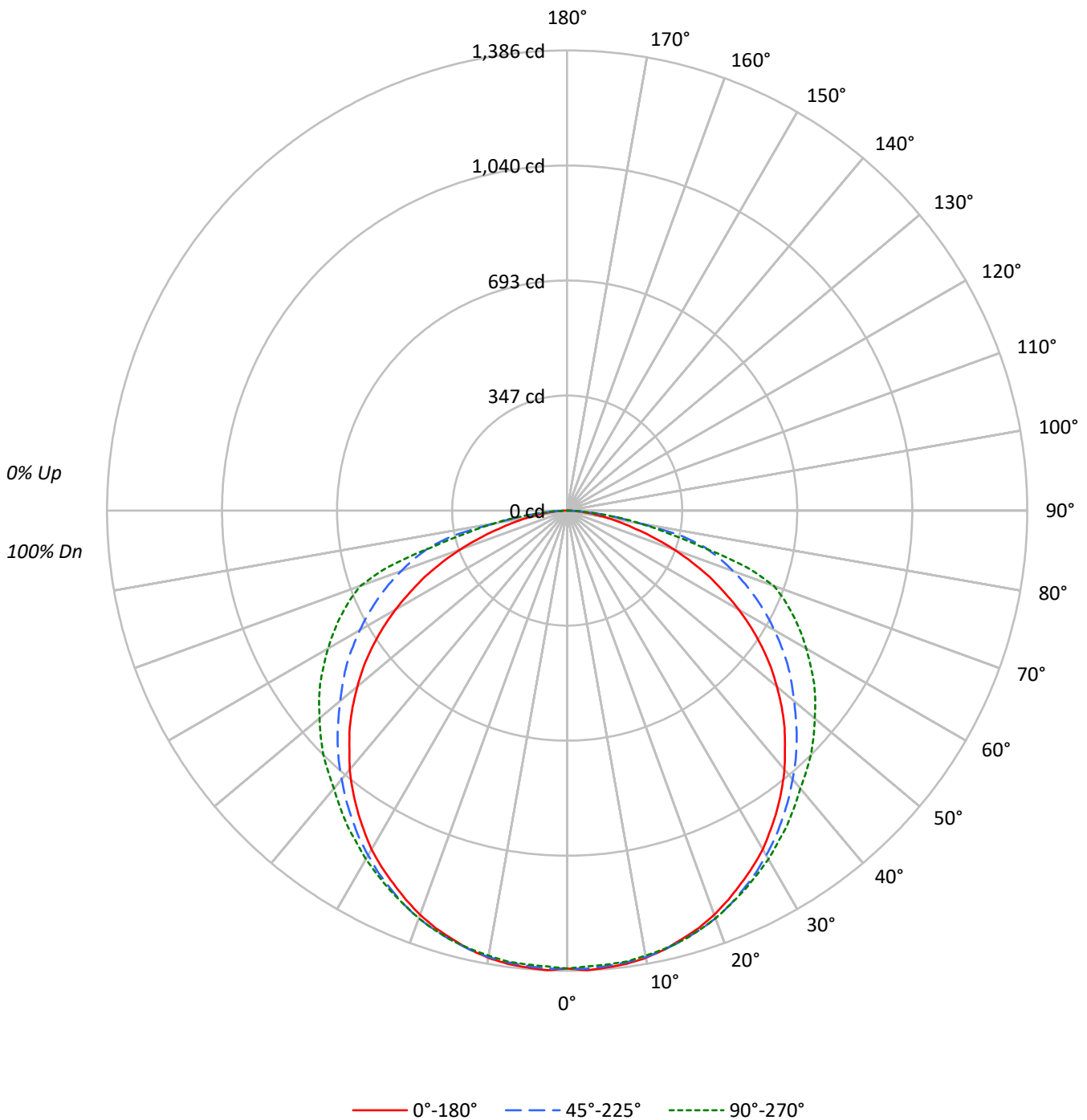
Input Watts (W): 57.64
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60		70	64	59		67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44		55	49	43		54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38		50	43	38		48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1855	1855	1855
5°	1866	1860	1853
10°	1869	1866	1859
15°	1861	1868	1868
20°	1855	1871	1871
25°	1840	1867	1873
30°	1831	1863	1883
35°	1810	1858	1899
40°	1789	1856	1920
45°	1762	1861	1977
50°	1726	1868	2038
55°	1681	1903	2130
60°	1607	1940	2238
65°	1507	2002	2396
70°	1347	2092	2606
75°	1113	2237	2155
80°	908	1729	1746
85°	730	1149	1079



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.0	3.0
10°-20°	377.9	8.7
20°-30°	577.6	13.2
30°-40°	706.4	16.2
40°-50°	755.9	17.3
50°-60°	723.8	16.6
60°-70°	612.3	14.0
70°-80°	388.1	8.9
80°-90°	89.3	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1086.5	24.9
0°-40°	1793.0	41.1
0°-60°	3272.7	75.0
0°-90°	4362.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4362.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1379	1379	1379	1379	1379	
5°	1381	1374	1377	1374	1372	131
15°	1336	1334	1341	1341	1341	377
25°	1239	1239	1257	1262	1262	572
35°	1102	1109	1131	1147	1156	689
45°	926	942	978	1018	1039	713
55°	717	739	811	879	908	639
65°	473	518	629	714	753	466
75°	214	302	430	428	415	233
85°	47	72	74	68	70	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1379.0	1379.0	1379.0	1379.0	1379.0
2.5°	1385.8	1379.0	1381.3	1379.0	1374.5
5°	1381.3	1374.5	1376.8	1374.5	1372.3
7.5°	1376.8	1370.0	1372.3	1370.0	1370.0
10°	1367.8	1361.0	1365.5	1363.3	1361.0
12.5°	1354.3	1349.7	1354.3	1352.0	1352.0
15°	1336.2	1334.0	1340.7	1340.7	1340.7
17.5°	1318.2	1315.9	1325.0	1325.0	1325.0
20°	1295.7	1293.4	1306.9	1306.9	1306.9
22.5°	1268.6	1266.4	1284.4	1284.4	1284.4
25°	1239.3	1239.3	1257.4	1261.9	1261.9
27.5°	1210.0	1210.0	1230.3	1237.1	1237.1
30°	1178.5	1178.5	1198.8	1207.8	1212.3
32.5°	1140.2	1144.7	1167.2	1178.5	1183.0
35°	1101.9	1108.6	1131.2	1146.9	1156.0
37.5°	1061.3	1068.1	1095.1	1113.1	1124.4
40°	1018.5	1027.5	1056.8	1079.3	1092.9
42.5°	971.2	984.7	1018.5	1047.8	1065.8
45°	926.1	941.9	977.9	1018.5	1038.8
47.5°	876.5	894.6	935.1	987.0	1007.2
50°	824.7	842.7	892.3	950.9	973.4
52.5°	772.9	793.2	851.8	914.9	941.9
55°	716.6	739.1	811.2	878.8	908.1
57.5°	658.0	685.0	766.1	838.2	869.8
60°	597.1	630.9	721.1	797.7	831.5
62.5°	534.0	574.6	676.0	757.1	793.2
65°	473.2	518.3	628.7	714.3	752.6
67.5°	407.9	464.2	581.4	673.7	709.8
70°	342.5	407.9	531.8	626.4	662.5
72.5°	277.2	356.0	482.2	567.8	567.8
75°	214.1	301.9	430.4	428.1	414.6
77.5°	162.2	252.4	353.8	301.9	304.2
80°	117.2	202.8	223.1	223.1	225.3
82.5°	78.9	155.5	144.2	142.0	146.5
85°	47.3	72.1	74.4	67.6	69.9
87.5°	22.5	24.8	20.3	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)